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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,286	07/06/2006	Dieter Funk	021500-143	1547

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EXAMINER

SZEWCZYK, CYNTHIA

ART UNIT	PAPER NUMBER
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1791

NOTIFICATION DATE	DELIVERY MODE
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01/06/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary	Application No. 10/551,286	Applicant(s) FUNK ET AL.	
	Examiner CYNTHIA SZEWCZYK	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. 112 2nd paragraph rejections have been withdrawn.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 7, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by MASUHIDE (JP 2000/247663).

MASUHIDE discloses a bed structure for floating sheet glass with an adjustable differential air pressure distribution. Figure 1 of MASUHIDE shows the bed consists of a chamber or bed (12) which is inherently connected to a source of compressed air with an upper surface (14) which is shaped to the outline of the glass and with a plethora of air holes (18 and 20). Figure 13a appears to have a greater number of perforations in the edges of the bed than the center of the bed. Figures 10, 12a-c, 13a and 13b show that the nozzle configuration may be adapted as necessary. Figure 10 shows an example wherein the central zone (30i) has smaller nozzles than the edge zone and thus a greater degree of perforation in the edge zone.

Regarding claim 2, MASUHIDE does not specify a specific central zone, however a person of ordinary skill would be able to identify an area of the bed as the central zone such that the area is equal to that of the edges.

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Regarding claim 7, Figure 3 shows that the nozzles get progressively wider.

Regarding claim 15, MASUHIDE discloses that the bed can be arranged in a heating furnace (para. 17).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over MASUHIDE (JP 2000/247663).

MASUHIDE discloses a bed structure for floating sheet glass with an adjustable differential air pressure distribution. MASUHIDE discloses that the air flow is regulated by closing part of the air discharge holes (abstract). It would have been obvious to one of ordinary skill in the art that the air discharge holes could have been adjusted to achieve the ranges of instant claims 3-5.

Regarding claim 6, it also would have been obvious to one of ordinary skill in the art that the holes could have been adjusted such that the degree of perforation decreased from the feed side of the glass to the other side. Therefore, the claimed invention would have been obvious.

7. Claims 8-10 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over MASUHIDE (JP 2000/247663) in view of CARLOMAGNO et al. (US 5,336,288).

MASUHIDE discloses a bed structure for floating sheet glass with an adjustable differential air pressure distribution. MASUHIDE fails to disclose the diameter of the nozzle and the material of the bed. CARLOMAGNO et al. discloses an apparatus for the manufacture of glass sheets using a glass cushion. Figure 4 of CARLOMAGNO et al. discloses that the nozzle has several sections of different diameters, just as the nozzles in figure 3 of MASUHIDE. SCHWARTZ et al. discloses that the first cylindrical section (57) has a diameter of 2 to 8 mm (col. 5, lines 47-48) which incorporates the range of instant claim 8.

Regarding claim 9, SCHWARTZ et al. discloses that the outlet section has a diameter of 40-100 mm (col. 4, lines 49-50). Cylindrical sections 58 and 59 would have diameters between the ranges of the outlet and cylindrical section 57. It would have been obvious to one of ordinary skill in the art that the diameters of instant claims 8 and 9 would be available as possible diameters.

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Regarding claim 10, Figure 4 also shows that the cylindrical sections contain a coinciding cylinder axis. MASUHIDE discloses that the diameter of the air holes can be adjusted (para. 63-64); therefore, it would have been obvious that the air holes could have been adjusted to the diameters of SCHWARTZ et al.

Regarding claim 13, SCHWARTZ et al. discloses that the chamber walls are constructed of refractory material (col. 4, lines 65-66) wherein ceramics are a type of refractory material. It would have been obvious to one of ordinary skill in the art to make the bed of MASUHIDE out of a refractory ceramic to ensure the bed could withstand the high temperatures of the operating conditions.

Regarding claim 14, figure 1 of MASUHIDE shows that the bed is designed as a one piece molding.

8. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over MASUHIDE (JP 2000/247663) in view of SCHWARTZ et al. (US 2004/0226318 A1).

MASUHIDE discloses a bed structure for floating sheet glass with an adjustable differential air pressure distribution. MASUHIDE fails to disclose a cloth on the upper wall. SCHWARTZ et al. discloses an apparatus and method for bending glass. SCHWARTZ et al. discloses that the mold can be covered in a heat resistant fabric in order to avoid marking the surface of the glass (para. 25, lines 1-3) and to protect the mold. SCHWARTZ et al. discloses that the fabric can be air permeable (para. 17, lines 20-24) and that a stainless steel can be used as a material for the cloth (claim 14). It

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would have been obvious to one of ordinary skill in the art to use the cloth of SCHWARTZ et al. on the bed of MASUHIDE because it would still allow gas to flow through but would protect the glass from getting marked. Therefore, the claimed invention would have been obvious.

Response to Arguments

9. Applicant's arguments filed October 15, 2008 have been fully considered but they are not persuasive. Applicant argues that MASUHIDE does not teach an edge portion with a greater degree of perforation. However, Figure 10 shows an example wherein the central zone (30i) has smaller nozzles than the edge zone and thus a greater degree of perforation in the edge zone. Figures 10, 12a-c, 13a and 13b show that the nozzle configuration may be adapted as necessary and thus it can be assumed that one of ordinary skill in the art would be able to adapt the apparatus of MASUHIDE to achieve the configuration of the claimed invention.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CYNTHIA SZEWCZYK whose telephone number is (571)270-5130. The examiner can normally be reached on Monday through Thursday 7:30 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/ Carlos Lopez/

Primary Examiner, Art Unit 1791